Scout Report sent out ☑

Noted in the NID File ☑

Location map pinned ☑

Approval or Disapproval Letter ☑

Date Completed, P. & A. or operations suspended _____

Pin changed on location map ☐

Affidavit and Record of A & P ☐

Water Shut-Off Test ☐

Gas-Oil Ratio Test ☐

Well Log Filed ☐

[redacted] NOTATIONS

[redacted] in N I D File ✓ Checked by Chief

[redacted] R Sheet ✓ Copy N I D to Field Office

Location Map Pinned ✓ Approval Letter ✓

Card Indexed ✓ Disapproval Letter

I W R for State or Fee Land

COMPLETION DATA:

Date Well Completed ..... Location Inspected .....

OW..... WW..... TA..... Bond released

GW..... OS..... PA..... State of Fee Land .....

LOGS FILED

Driller's Log.....

Electric Logs (No.).....

E..... I..... E-I..... GR..... GR-N..... Micro.....

Lat..... Mi-L..... Sonic..... Others.....

Form OGCC-1

STATE OF UTAH
OIL AND GAS CONSERVATION COMMISSION
NOTICE OF INTENTION TO DRILL

February 13 19 60

Oil and Gas Conservation Commission:

In compliance with Rule C-4, notice is hereby given that it is our intention to commence the work of drilling well No. 1, which is located 1675 ft from (N / S) line and 1800 ft from (E / W) line of ~~¼ ¼~~ of Sec 6, Twp 2N, R 6E, SLM (Meridian), Chalk Creek area (Field or Unit) section lines.

Summit (County)

LAND: Fee and Patented.( )
State.....( )
Lease No.
Public Donain....(X)
Lease No Salt Lake 070555

Name of Owner Mountain Fuel Supply Co.
Address P. O. Box 1129
Rock Springs, Wyoming
Phone Empire 2-5611

Is Location a regular or exception to spacing rule ? Regular. Has surety bond been filed? Yes

With whom ? Federal (State or Federal) ? Area in drilling Unit 631.38/ Lease drilling Elevation of ground above sea level is to follow ft. All depth measurements taken from top of Kelly bushing (Derrick Floor, Rotary Table or Kelley Bushing) which is to follow Ft above ground. Type of tools to be used Rotary

Proposed Drilling depth 2300 ft. Objective formation Kelvin

PROPOSED CASING PROGRAM

Size of Casing Inches A.P.I.	Weight Per Foot	Grade and Type	Amount Ft. In.	Top	Bottom	Cementing Depths
10-3/4	32.75&40.50	H-40 ST&C	100'	0	100'	at 100'
7	20	J-55 ST&C	2300'	0	2300'	at 2300'

REMARKS (use back of form for additional remarks or info)

AFFIDAVIT

I hereby certify under the penalty of perjury, that the information contained and statements herein made are to the best of my knowledge and belief, True, correct and complete,

Approved Date 19

By

Title

By

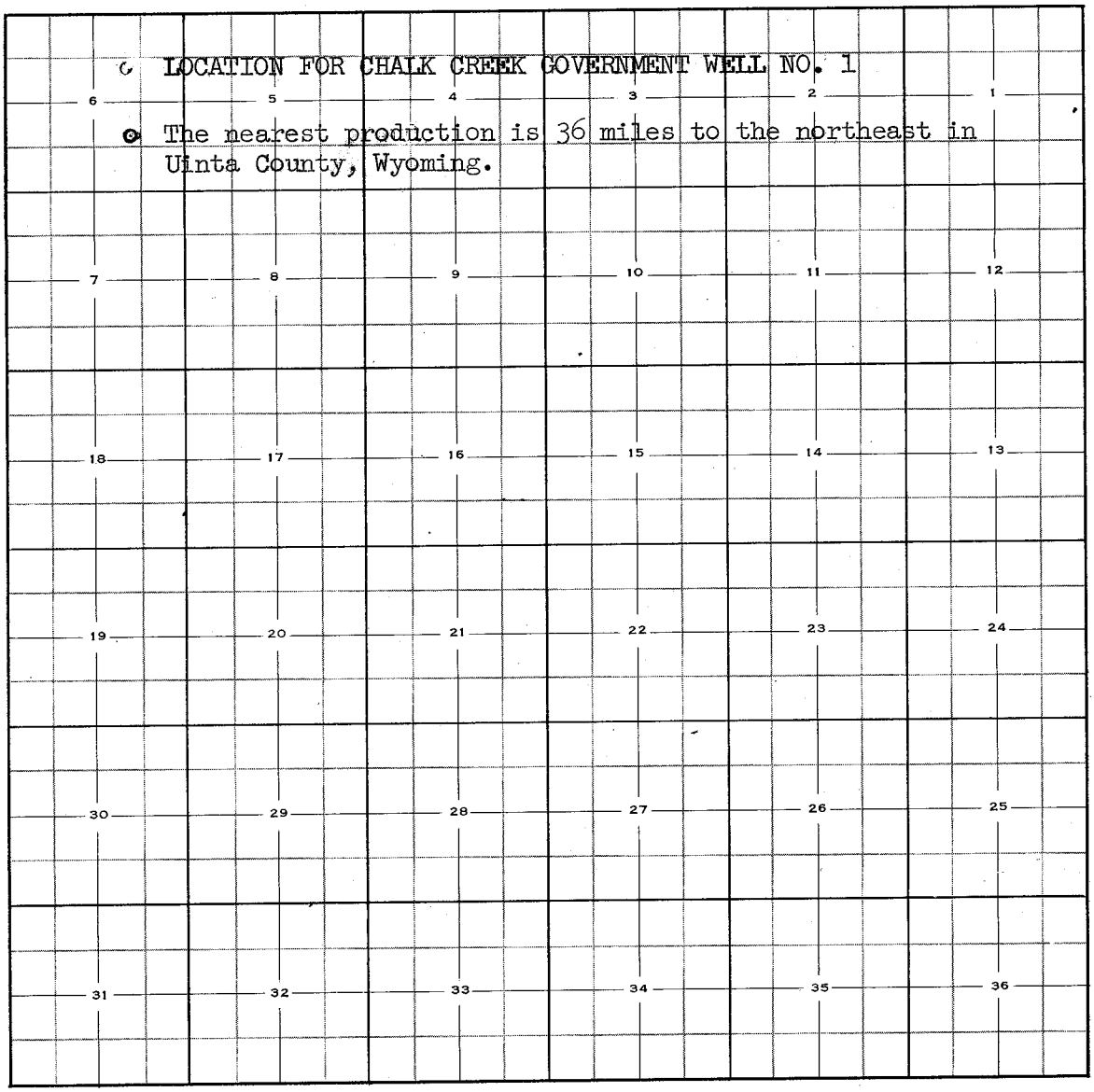
Vice President
(Title or Position)
Mountain Fuel Supply Company
(Company or Operator)

Address P. O. Box 1129
Rock Springs, Wyoming

INSTRUCTIONS:
1. Complete this form in Duplicate and mail, both copies to the Oil and Gas Conservation Commission, Rm 105, Capitol Bldg., Salt Lake City 14, Utah.
2. A plat or map must be attached to this form showing the location of all leases, property lines, drilling and producing wells within an area of sufficient size so that the commission may determine whether the location of the well conforms to applicable rules, regulations and orders.
3. Any information required by this form that cannot be furnished at the time said form is submitted must be forwarded to the commission as soon as available.

892 ROSS-MARTIN CO. TULSA 1, OKLAHOMA TOWNSHIP PL/ (SCALE 1 IN.—1 MI.)

TOWNSHIP 2 North RANGE 6East COUNTY Summit STATE Utah



CL1-51 (REV. 1966)

A

CHEM LAB

WATER ANALYSIS EXCHANGE REPORT

Chalk Creek #1

MEMBER	Mountain Fuel Supply Company	LAB NO.	166881-2
OPERATOR	Mountain Fuel Supply Company	REPORT NO.	
WELL NO.	Surface pit	LOCATION	NW SE 9-2N-5E
FIELD	Coalville Gas Storage Area	FORMATION	
COUNTY	Summit	INTERVAL	
STATE	Utah	SAMPLE FROM	Surface Pit
		DATE	July 23, 1975

REMARKS & CONCLUSIONS:

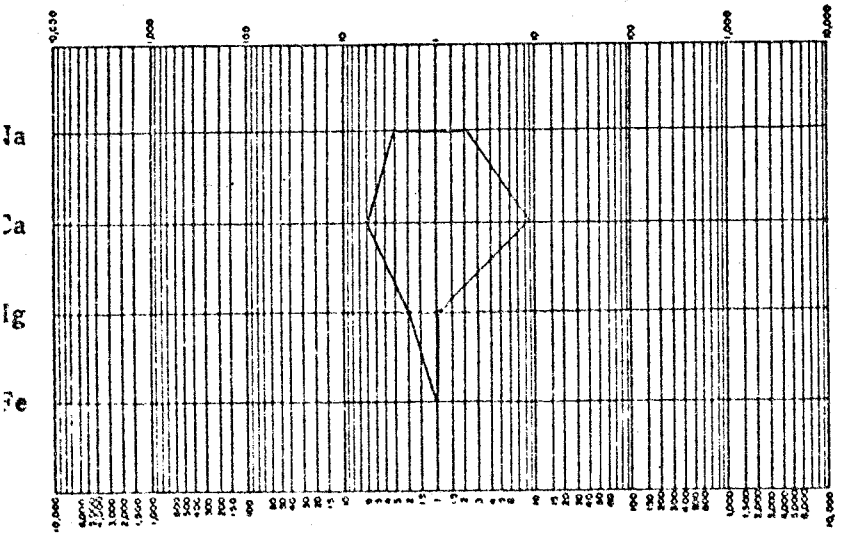
Cations	mg/l	meq/l	Anions	mg/l	meq/l
Sodium	74	3.24	Sulfate	28	0.58
Potassium	8	0.20	Chloride	68	1.92
Lithium			Carbonate	-	
Calcium	117	5.84	Bicarbonate	549	9.00
Magnesium	27	2.22	Hydroxide		
Iron	Trace		Hydrogen sulfide	absent	
Total Cations		13.42	Total Anions		13.42

Total dissolved solids, mg/l	592	Specific resistance @ 68° F.:	
NaCl equivalent, mg/l	477	Observed	11.00 ohm-meters
Observed pH	7.4	Calculated	12.00 ohm-meters

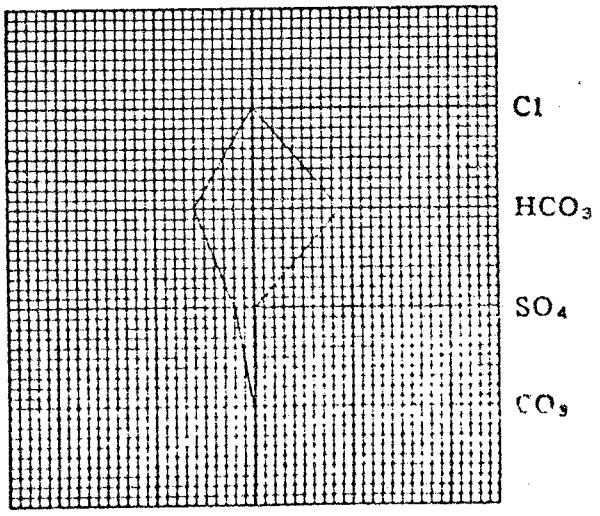
WATER ANALYSIS PATTERNS

MEQ per unit

LOGARITHMIC



STANDARD



(Na value in above graphs includes Na, K, and Li)

NOTE: Mg/l = Milligrams per liter. Meq/l = Milligram equivalents per liter

Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components

February 15, 1960

Mountain Fuel Supply Company
P. O. Box 1129
Rock Springs, Wyoming

Attention: J. P. Simon,
Vice President

Gentlemen:

This is to acknowledge receipt of your notice of intention to drill Well No. Federal 1, which is to be located 1675 feet from the south line and 1800 feet from the east line of Section 6, Township 2 North, Range 6 East, SLBM, Summit County, Utah.

The proposed location of this well does not comply with Rule C-3(b) of our rules and regulations; nor has information been furnished for an unorthodox location as required by Rule C-3(c).

Before approval can be given for drilling this well, it will be necessary for you to file a new notice of intention to drill in compliance with Rule C-3(b), or if an unorthodox location is necessary, a request for such spacing must be made as required by Rule C-3(c).

Yours very truly,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT
EXECUTIVE SECRETARY

CBF:co

cc: D. F. Russell, Dist. Eng.
U. S. Geological Survey
Salt Lake City, Utah

MOUNTAIN FUEL SUPPLY COMPANY

P. O. BOX 1129

ROCK SPRINGS, WYOMING

February 16, 1960

B. W. CROFT
MANAGER, PRODUCING DIVISION

Mr. Cleon B. Feight, Executive Secretary
Oil & Gas Conservation Commission
The State of Utah
310 Newhouse Building
10 Exchange Place
Salt Lake City 11, Utah

Dear Mr. Feight:

Reference is made to your telephone conversation of this date with our Mr. E. J. Kilburn regarding the proposed location for a wildcat well in sec. 6, T. 2N., R. 6E., Summit County, Utah. Reference is further made to your letter of February 15, 1960, calling our attention to the unorthodox location of the above proposed well.

The reason for the location as picked is geographical, in that the well is located on the side of a hill in a canyon and in order to comply with spacing regulations of the Utah Oil and Gas Conservation Commission it would throw an undue hardship on us to establish such a location.

In further compliance with your regulations, Mountain Fuel Supply Company owns Oil and Gas Lease SL-070555 from the Federal Government which embraces all of section 6. The intended location is well in excess of 660 feet from the nearest lease other than that held by Mountain Fuel Supply Company.

It would be sincerely appreciated if you would waive the regulations and allow us to drill the well at the location as provided on our Notice of Intention to Drill.

Sincerely,

B. W. Croft

B. W. Croft

BWC:kj

cc: J. T. Simon
E. J. Kilburn

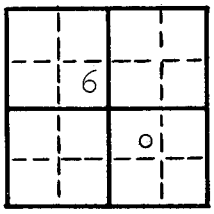
Form OGCC-1 (SUBMIT IN DUPLICATE)

LAND:

Fee and Patented ☐
State ☐
Lease No.

Public Domain ☒
Lease No. SL 070555

Indian ☐
Lease No.



STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION
SALT LAKE CITY, UTAH

SUNDRY NOTICES AND REPORTS ON WELLS

Notice of Intention to Drill	XXX	Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair		Subsequent Report of Redrilling or Repair	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Chalk Creek Government Well No. 1 February 16, 1960

Well No. 1 is located 1675 ft. from {XXX N / S} line and 1800 ft. from {E / XXX W} line of Sec. 6

SE sec. 6	2N	6E	Salt Lake
(¼ Sec. and Sec. No.)	(Twp.)	(Range)	(Meridian)

Chalk Creek area	Summit	Utah
(Field)	(County or Subdivision)	(State or Territory)

The elevation of the derrick floor above sea level is to follow feet.

A drilling and plugging bond has been filed with U. S. Geological Survey - nation-wide bond.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important work, surface formation, and date anticipate spudding-in.)

We would like permission to drill the subject well to an approximate depth of 2300 feet as a test of the Kelvin formation. Approximately 150 feet of 10-3/4-inch surface pipe will be cemented to surface. If commercial oil or gas production is encountered, a production string of 7-inch casing will be run to total depth and cemented with sufficient cement to protect and isolate the producing zones encountered.

Mountain Fuel Supply Company owns the entire lease in which this well will be drilled and request that you waive the provisions of Rule C-3(b) in conformity with the exception stated under Rule C-3 (c) (2) (I).

I understand that this plan of work must receive approval in writing by the Commission before operations may be commenced.

Company Mountain Fuel Supply Company

Address P. O. Box 1129

Rock Springs, Wyoming

By B. W. Croft

Title Manager, Producing Division

INSTRUCTIONS: A plat or map must be attached to this form showing the location of all leases, property lines, drilling and producing wells, within an area of sufficient size so that the Commission may determine whether the location of the well conforms to applicable rules, regulations and orders.

February 17, 1960

Mountain Fuel Supply Company
P. O. Box 1129
Rock Springs, Wyoming

Attention: Mr. B. W. Croft, Manager
Producing Division

Gentlemen:

With reference to our telephone conversation and your letter of February, 16, please be advised that approval to drill Well No. Chalk Creek Gov't 1, 1675 feet from the south line and 1800 feet from the east line of Section 6, Township 2 North, Range 6 East, SLBM, Summit County, Utah, is hereby granted under Rule C-3(c) of our rules and regulations.

This approval terminates within 90 days if the above mentioned well is not spudded in within said period.

Yours very truly,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT
EXECUTIVE SECRETARY

CBF:co

cc: D. F. Russell, Dist. Eng.
U. S. Geological Survey
Federal Building
Salt Lake City, Utah

MOUNTAIN FUEL SUPPLY COMPANY

P. O. BOX 1129

ROCK SPRINGS, WYOMING

February 18, 1960

J. T. SIMON
VICE PRESIDENT

Mr. Cleon B. Feight, Executive Secretary
Oil and Gas Conservation Commission
The State of Utah
310 Newhouse Building
10 Exchange Place
Salt Lake City, Utah

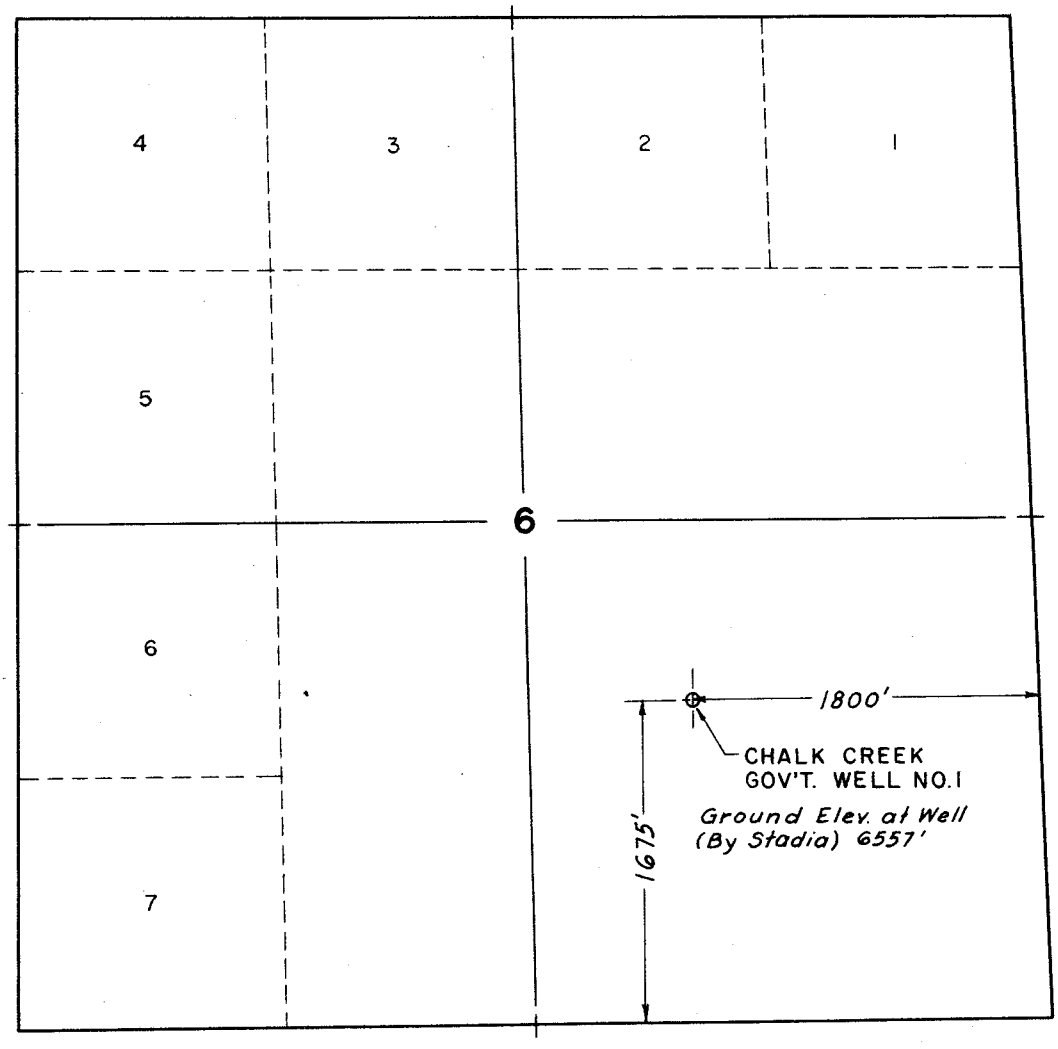
Dear Mr. Feight:

Enclosed are two copies of Mountain Fuel Supply Company's surveyor's plat for the location of Chalk Creek Government Well No. 1 in the $NW\frac{1}{4}$ $SE\frac{1}{4}$ of section 6, T. 2 N., R. 6 E., Summit County, Utah.

Yours very truly,

Steve Majhanovich
Secretary to J. T. Simon

sm
Enc



State of Wyoming
County of Sweetwater } SS.

I, R. C. Day, of Rock Springs, Wyoming, hereby certify that this map was made from notes taken during an actual survey made under my direction by J.E. Kessner on February 12, 1960; and that it correctly represents the location of the well for Mountain Fuel Supply Company in Section 6, T. 2 N., R. 6 E., Summit County, Utah.

R. C. Day
Engineer

Registration Nº 124

MAP

CHALK CREEK GOVERNMENT WELL Nº 1

(O. & G. LEASE S.L. 070555)

NW SE SEC. 6, T. 2 N., R. 6 E.
SUMMIT COUNTY, UTAH

MOUNTAIN FUEL SUPPLY COMPANY
ROCK SPRINGS, WYOMING

SCALE 1" = 1000'

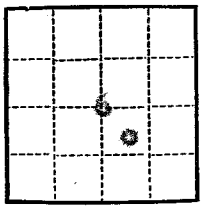
2-17-60 Rwm

M-6178
FILE 8-11

INFORMATION COPIES FOR UTAH OIL AND GAS CONSERVATION COMMISSION

BEST COPY AVAILABLE

Form 9-331a
(Feb. 1951)



(SUBMIT IN TRIPLICATE)

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

Land Office Salt Lake

Lease No. 070553

Unit Lease

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	XXX
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Chalk Creek Gov't. Well No. 1 March 10, 1960

Well No. 1 is located 1675 ft. from {S} line and 1800 ft. from {E} line of sec. 6

SE sec. 6 (¼ Sec. and Sec. No.) 2N (Twp.) 6E (Range) S. L. M. (Meridian)

Chalk Creek area (Field) Summit (County or Subdivision) Utah (State or Territory)

The elevation of the derrick floor above sea level is 6563.63 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

The subject well was spudded on March 2, 1960. Nine inch hole was drilled to 175 feet and the hole reamed to 13-3/4 inches to 161 feet. At this depth the following surface casing was run and cemented.

	Net	Gross
1 Nat'l. 10" type G 2000 psig WP head	0.75'	0.49'
3 jts. 10-3/4" 32.75# H-40 8rnd thd STAC casing	96.14'	96.83'
2 jts. 10-3/4" 40.50# H-40 8rnd thd STAC casing	49.06'	49.64'
1 Bowco 10-3/4" 8rnd guide shoe	1.15'	1.15'
	147.10'	148.11'

The above casing was landed at 155.38' KBM or 8.28' below the KB. Cemented casing with 125 sacks Ideal regular cement. Had good mud returns prior to and while mixing and displacing cement. Approximately 8 barrels (40') of cement slurry returned to surface. Pressure tested casing to 500 psi for 1/4 hour; pressure test held satisfactorily. Present drilling 9-inch hole at 247 feet.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Mountain Fuel Supply Company

Address P. O. Box 1129

Rock Springs, Wyoming

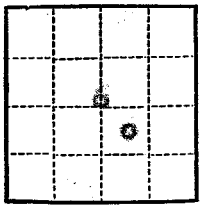
By J. Harrison

Title Vice President

GPO 9 18 507

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

Form 9-331a
(Feb. 1951)



(SUBMIT IN TRIPLICATE)

Land Office Salt Lake

Lease No. 070555

Unit Lease

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	XX
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Chalk Creek Gov't. Well No. 1 March 29, 1960

Well No. 1 is located 1675 ft. from {N/S} line and 1800 ft. from {E/W} line of sec. 6

SE sec. 6 (¼ Sec. and Sec. No.) | 2N (Twp.) | 6E (Range) | S. L. M. (Meridian)

Chalk Creek area (Field) | Summit (County or Subdivision) | Utah (State or Territory)

The elevation of the derrick floor above sea level is 6363.63 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

The coring point in the subject well was reached at a depth of 950 feet. Coring has been continuous from 950 feet to the present coring depth of 1510 feet, and continous coring is anticipated to approximate total depth of 2300 feet. All coring is being done in the Kelvin formation.

DST #1: 1222'-1295', tool open two hours, shut in 30 minutes, no blow. Recovered 1115' muddy fresh water. No pressures were obtained due to faulty operation of pressure bombs.

DST #2: 1308'-1409', tool open 69 minutes, shut in 1 hour, gas to surface immediately with heavy spray of fresh water, no gauge obtainable. Recovered 365' muddy fresh water. IBHSIP 540 psi, IHHP 615 psi, BHFP's 241-260 psi, FBHSIP 525 psi, FHHP 600 psi. (Over)

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Mountain Fuel Supply Company

Address P. O. Box 1129

Rock Springs, Wyoming

By [signature]

Title Vice President

GPO 9 18 507

DST #3: 1361'-1409', tool open 63 minutes, shut in 1 hour. Tool dead after 9 minutes. Recovered 295' slightly muddy fresh water. IBHSIP 530 psi, IHHP 6 10 psi, BHFP's 285-405 psi, FBHSIP 530 psi, FHHP 6 10 psi.

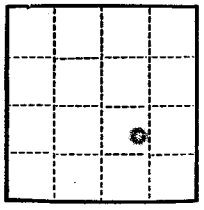
DST #4: Straddle packer test from 1308' to 1334', total depth 1409'. Tool open 1 hour, shut in 1 hour. Gas to surface immediately, followed by heavy spray of fresh muddy water which continued throughout test. Recovered 295' slightly muddy fresh water. IBHSIP 530 psi, IHHP 610 psi, BHFP's 285-405 psi, FBHSIP 530 psi, FHHP 610 psi.

DST #5: 1411'-1452', tool open 2 hours, shut in 1 hour. Fair blow during initial opening, increasing to good blow after 30 minutes, dying slowly to end of test, no gas to surface. Recovered 1300' muddy fresh water. IBHSIP 554 psi, IHHP 665 psi, BHFP's 160-554 psi, FBHSIP 554 psi, FHHP 665 psi.

DST #6: 1455'-1487', tool open 2 hours, shut in 1 hour. Fair blow during 20 minutes, dying, dead in 70 minutes, no gas to surface. Recovered 1350' muddy fresh water. IBHSIP 555 psi, IHHP 660 psi, BHFP's 185-555 psi, FBHSIP 570 psi, FHHP 660 psi.

COPIES FOR UTAH OIL & GAS C BEST COPY AVAILABLE N COMMISSION

Form 9-331a
(Feb. 1961)



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

Land Office Salt Lake
Lease No. 070555
Unit Lease

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
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NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	X
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Chalk Creek Gov't. Well No. 1 April 11, 1960

Well No. 1 is located 1675 ft. from {N/S} line and 1800 ft. from {E/W} line of sec. 6

SE sec. 6 (¼ Sec. and Sec. No.) | 2N (Twp.) | 6E (Range) | S. L. M. (Meridian)

Chalk Creek area (Field) | Summit (County or Subdivision) | Utah (State or Territory)

The elevation of the derrick floor above sea level is 6563.6 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

The well is presently coring at a depth of 1872 feet and coring has been continuous since the last depth reported to you on March 29 at which time the well was coring at a depth of 1510 feet.

DST #7: 1667'-1722', Kelvin formation, tool open 1 hour, shut in 1 hour, no blow during test. Recovered 1' mud. IBHSIP 0 psi, IHHP 780 psi, BHFP's 0 psi, FBHSIp 0 psi, FHHP 760 psi.
DST #8: 1782'-1815', Kelvin formation, tool open 70 minutes, shut in 1 hour, weak to fair blow during test, no gas up. Recovered 1105' of muddy fresh water. IBHSIP 690 psi, IHHP 778 psi, BHFP's 60-439 psi, FBHSIP 690 psi, FHHP 778 psi.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Mountain Fuel Supply Company

Address P. O. Box 1129

Rock Springs, Wyoming

By [signature]

Title Vice President

GPO 9 18 507

MOUNTAIN FUEL SUPPLY COMPANY

P. O. BOX 1129

ROCK SPRINGS, WYOMING

EMpire 2-5611

L. W. FOLSOM
MANAGER, EXPLORATION DIVISION

April 14, 1960

Mr. Cleon B. Feight
Oil and Gas Conservation Commission
Room 310, Newhouse Building
Salt Lake City, Utah

Dear Mr. Feight:

I believe that it is your organization's policy not to release any information disclosed from summary reports submitted to you on various drilling wells in your area of jurisdiction. It is particularly important to us that no information be released on our Chalk Creek Government Well No. 1 in Summit County, Utah, as we are drilling this well as a tight hole. Your fullest cooperation would be sincerely appreciated in this regard.

Yours very truly,

L. W. Folsom

LWF:lp

Form 9-331 a
(Feb. 1951)

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

Land Office Salt Lake
Lease No. 070555
Unit Lease

	6		
		o	

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	XX
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Chalk Creek Government Well No. 1 April 27, 1960

Well No. 1 is located 1875 ft. from {S} line and 1800 ft. from {E} line of sec. 6

SE NW SE sec. 6 (¼ Sec. and Sec. No.) 2N (Twp.) 6E (Range) S. L. M. (Meridian)

Chalk Creek area (Field) Summit (County or Subdivision) Utah (State or Territory)

The elevation of the derrick floor above sea level is 6563.6 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

DST #9: 1817'-1894', tool open 1 hour, shut in 1 hour, opened with good blow, dead in 20 minutes. Recovered 1560' muddy fresh water. IH 880 psi, BHFP's 770-770 psi, BHSIP's 770-780 psi, FHHP 870 psi. Kelvin formation.
DST #10: 2053'-2120', tool open 1 hour, shut in 1 hour, no blow while tool was open. Recovered 15' mud. IH 965 psi, BHFP's 40-40 psi, BHSIP's 965-62 psi, FHHP 965 psi. Kelvin formation.
Coring in the subject well stopped at a depth of 2120' and the well was drilled to total depth of 2349'. A 130-sack cement plug was layed from 2118' to 1918'.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Mountain Fuel Supply Company

Address P. O. Box 1129

Rock Springs, Wyoming

By J. T. Simon by s m

Title Vice President

INFORMATION COPIES FOR OFFICE OF STATE MINERAL SUPERVISOR

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Form 9-331a
(Feb. 1951)

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

Land Office Salt Lake

Lease No. 070555

Unit Lease

(SUBMIT IN

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

CONFIDENTIAL

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	XX
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Chalk Creek Government Well No. 1 , 19

Well No. 1 is located 1675 ft. from {N/S} line and 1800 ft. from {E/W} line of sec. 6

SE NW SE sec. 6 (¼ Sec. and Sec. No.) | 2N (Twp.) | 6E (Range) | S. L. M. (Meridian)

Chalk Creek area (Field) | Summit (County or Subdivision) | Utah (State or Territory)

The elevation of the derrick floor above sea level is 6563.63 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Total depth of 2349' was reached on the subject well and the well was plugged back to 1918'. A production string of 7" OD casing was run as follows:

	Net	Gross
57 jts. 7" 20# J-55 8rnd thd ST&C casing	1770.26'	1785.08'
1 Howco 7" formation packer shoe casing swivel	3.62'	3.91'
1 Howco 7" formation packer shoe	2.69'	2.69'
	1776.77'	1791.68'

The above casing was landed at a depth of 1783.12' KBM, using 300 sacks of 50-50 Pozmix A cement. Good mud returns were obtained while mixing and displacing cement. A temperature survey indicated top of cement behind the 7" OD casing at 500' KBM. Pressure tested casing to 1000 psi for 15 minutes; pressure test held satisfactorily.

(Over)

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Mountain Fuel Supply Company

Address P. O. Box 1129

Rock Springs, Wyoming

By [signature]

Title Vice President

GPO 9 18 507

Using an 11" underreamer, reamed out the 9" hole below the 7" OD casing to a depth of 1631'. Released rig on May 3, 1960, and moved in Company owned pulling machine. Rigged up pulling machine over well to clean out cavings in underreamed portion of hole below 7" OD casing.

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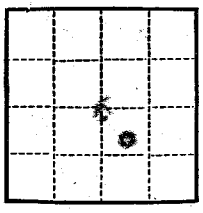
Budget Bu
Approval e

Form 9-331a
(Feb. 1951)



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Salt Lake
Lease No. 070555
Unit L.

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	XX
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Chalk Creek Government Well No. 1 June 10, 1960

Well No. 1 is located 1675 ft. from ~~XMX~~ {S} line and 1800 ft. from {E} ~~XWX~~ line of sec. 6

SE NW SE sec. 6 (¼ Sec. and Sec. No.) | 2N (Twp.) | 6E (Range) | 6th P. M. (Meridian)

Chalk Creek area (Field) | Summit (County or Subdivision) | Utah (State or Territory)

The elevation of the derrick floor above sea level is 6563.63 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

After reaming out to 1831' to 11 inches, below the casing point, released rotary rig and moved in Company-owned pulling unit. Rigged up pulling unit and started bailing out well with sand pump to clean out cavings. Bailing indicated no presence of the cement plug which was laid from 2118' to 1918'. Cleaned out to total depth of 2349'. Ran into well with tubing and using Halliburton, laid a 3¼ sack cement plug from 1912' to 1670'.

Checked water level in well at 103' KBM. Ran tubing down to 815' KBM and started swabbing. Made 25 runs in 4 hours 39 minutes, recovering a total of 152.6 barrels of water. Treated well with 15% hydrochloric acid as follows:

2½" tubing at 1866', pumped in 9 bbls. acid.
2⅜" tubing at 1866', pumped in additional 9 bbls acid
2⅜" tubing at 1831', pumped in 6 bbls. acid.

(Over)

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Mountain Fuel Supply Company

Address P. O. Box 1129
Rock Springs, Wyoming

By [signature]

Title Vice President

GPO 9 18 507

Finished displacing acid into well and pulled tubing. Using weight section on wire line, checked plugged back depth at 1670'. Checked fluid level at 119' KBM.

Reran tubing back into well for swabbing test after acidizing, swabbing from a depth of 1002' and 1613'. Made a total of 25 runs in 3 hours 20 minutes. Recovered a total of 159.3 barrels of water. At the end of the last run, checked fluid level at 149'; 93 minutes after the last run with swab, checked fluid level at 128' KBM. Pulled out of hole with 2-7/8" tubing.

Rigged up to run swabbing test on casing. Made a total of 33 runs with casing swab in 8 hours 3 minutes, recovering a total of 1148 barrels of water. Fluid level prior to swabbing the casing was at 119' KBM. Fluid level at the end of the swabbing test was 136.5' KBM.

One hour and 27 minutes after last swabbing test was run, checked fluid level in well at 127.5' KBM.

After 72 hours, checked fluid level in well at 112' KBM. Set Howco hookwall packer in 7" casing at 1759.55' KBM and pressure tested casing to 910 psi for one hour; pressure test held satisfactorily.

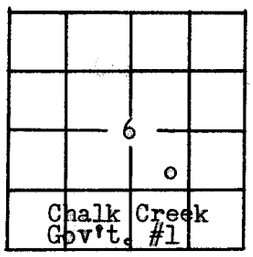
Pulled tubing and hookwall packer from well, laying down tubing. Installed a 7" x 2" cementing swage on top of the 7" OD casing and installed a bull-plugged 2" Crane valve on top of the cementing swage. Released and moved off Wichtex pulling unit.

This well is shut in, pending its tentative use as a gas injection well for gas storage purposes.

Field Chalk Creek State Utah County Summit Sec. 6 T. 2 N. R. 6 E.

Company Mountain Fuel Supply Farm Chalk Creek Government Well No. 1

Location 1800' FEL, 1675' FSL Elev. 6562.7', Gr. 6570' RB



Drilling Commenced March 2/1960 Completed April 22/1960

Rig Released May 3/1960 Total Depth 2349'

Casing Record 10-3/4-inch at 155.38 feet w/125 sacks cement
7-inch at 1783.12 feet w/300 sacks cement

Tubing Record None

Perforations None

I. P. Gas No Production Oil

Sands —

Shut-in Surface Pressures —

Remarks Completed as gas storage injection well

FORMATION RECORD

FORMATION RECORD

KELVIN

	From	To
	SURFACE	
No Samples.	0	170
Shale, variegated, sandy, firm; sandstone, fine grained, tan, hard, with black grains.	170	210
Same as above, with loose, large quartz grains, white.	210	240
Shale, gray, brown, sandy, firm; sandstone as above.	240	260
Shale as above; sandstone, loose, coarse grained, white, much cement.	260	328
Sandstone, tan, fine grained, friable, calcareous, subrounded grains, with few black inclusions; shale, variegated as above.	328	340
Shale, variegated, brown, brownish red, gray, silty, firm; sandstone, tan as above.	340	346
Shale, variegated as above; with sandstone, tan, very fine grained, hard.	346	367
Shale, variegated as above; sandstone, very fine to fine grained, tan as above.	367	390
Shale as above; sandstone as above.	390	408
Sandstone, tan, very fine grained, friable, calcareous, well sorted, clean; some sandstone, tan, very fine grained, hard; shale, variegated, silty.	408	419
Shale as above; sandstone as above.	419	439
Sandstone, tan, very fine grained, friable, calcareous, well sorted, clean; shale, variegated, silty.	439	448
Shale, mostly gray, some variegated, some silty, firm to soft; sandstone as above.	448	461
Shale, mostly gray as above; sandstone as above.	461	470
No Samples.	470	476
Lost Circulation @ 476'		
Shale, gray, variegated, silty, firm; trace sandstone, tan, very fine grained.	476	480
Shale as above; increase in sandstone, tan as above.	480	500
Same as above; decrease in sandstone.	500	520
Sandstone, gray, fine grained, friable, well sorted, clean, with pink and black inclusions; shale, variegated, silty as above.	520	530
Shale, variegated as above; sandstone as above.	530	560
Sandstone, gray, tan, very fine grained, some fine grained, friable, well sorted, clean, calcareous, with black and pink grains; shale, variegated as above.	560	580

Field Chalk Creek — Sec. 6 T. 2 N. R. 6 E.

Farm Chalk Creek Government — Well No. 1

Company Mountain Fuel Supply

FORMATION RECORD	From	To
Same as above; increase in sandstone; shale, variegated.	580	590
Sandstone as above, much loose; shale, variegated, silty as above.	590	617
Sandstone, white, fine grained, some very fine grained, loose, friable, clean, well sorted, no fluorescence; shale, variegated as above.	617	630
Shale, variegated, gray, brown, tan, silty, firm; sandstone, tan, white, loose.	630	710
Shale as above; sandstone, white, tan, loose and friable.	710	720
Shale as above; sandstone as above.	720	730
Shale, variegated, silty as above; sandstone, loose, fine grained.	730	760
Shale as above; sandstone, very fine to fine grained, tan to gray, hard, calcareous, some black and pink grains.	760	770
Sandstone, light gray, fine grained, hard to friable, well sorted, clean, abundant tan, black and pink grains, fluorescent; shale, variegated.	770	790
Decrease in sandstone, no fluorescence; shale, variegated as above.	790	840
Shale, variegated, silty to sandy, firm; sandstone.	840	890
Same as above; increase in sandstone to mostly sandstone, very fine grained, hard; trace limestone, white.	890	900
Shale, variegated, silty, firm; sandstone, tan, very fine grained, hard.	900	930
Sandstone, tan, very fine grained, hard, calcareous, well sorted, with clayey matrix; shale, variegated; some evidence of calcite filled fractures.	930	950

Core #1: 950'-993' Recovered 18'

6.0' - Shale, dark brown, sandy, hard, calcareous.
7.0' - Siltstone, tan, very hard, calcareous, with a few black grains, vertical calcite filled fractures, some veining or possible bedding at 30°.
1.5' - Shale, red and gray, mottled, silty, hard, blocky, calcareous.
3.5' - Shale, gray, silty, firm to hard, calcareous, blocky, bottom of core burnt in.

Lost core probably from bottom.

Core #2: 993'-1001.5' Recovered 8.5'

2.5' - Shale, dark brown and gray, mottled, silty, hard, calcareous, blocky with calcite filled fractures at 10° and 80°.
6.0' - Sandstone, light gray, very fine grained, hard, calcareous, with calcite filled fractures at 35°, spotty yellow fluorescence and cut in bottom foot.

Core #3: 1001.5'-1027' Recovered 25'

1.0' - Sandstone, light gray, very fine grained, well sorted, calcareous, hard, silty matrix, some black and pink grains, no shows.
0.5' - Shale, gray, calcareous, hard with shale conglomerate, appears to be reworked shale of 1/4 to 1" inclusions.
3.0' - Sandstone, light gray, very fine grained, hard, calcareous, silty matrix, some black and pink grains, no shows.
3.0' - Shale, conglomerate, gray and light gray, hard with rounded dark to light gray shale inclusions, calcareous.
1.0' - Shale, gray, hard, slightly calcareous.
4.0' - Shale, gray, green, red mottled, silty, hard, noncalcareous.
6.0' - Siltstone, green and brown, hard, calcareous, with green and black grains.
2.0' - Siltstone, gray, hard, calcareous, with black grains.
2.5' - Shale, brown, hard, calcareous, blocky with fractures at 80°, fractures are open.
1.5' - Shale, red and gray mottled, calcareous, hard with conchoidal fracture.
0.5' - Shale, dark gray, firm, waxy, calcareous with abundant biotite.

Field Chalk Creek Sec. 6 T. 2 N. R. 6 E.

Farm Chalk Creek Government Well No. 1

Company Mountain Fuel Supply

FORMATION RECORD	FORMATION RECORD	From	To

Core #4: 1027'-1055' Recovered 28'

1.5' - Shale, dark gray, firm, waxy, slightly calcareous, possibly 30° bedding.
5.0' - Shale, red and gray mottled, silty, calcareous, firm.
6.0' - Siltstone, greenish gray, calcareous, hard, tight.
4.5' - Shale, dark gray to black, waxy, noncalcareous, blocky, possible bedding at 30° and calcite filled fractures at 50°.
11.0' - Shale, brownish red, calcareous, firm, hard.

Core #5: 1058'-1099' Recovered 40', made 3' depth correction

40.0' - Shale, brown, slightly calcareous to calcareous, slightly silty to silty, firm to hard with some shale, gray to black, slightly calcareous, waxy with calcite filled fractures at 30° and 50°.

Core #6: 1099'-1145' Recovered 46'

10.0' - Shale, brown, gray, silty, slightly calcareous to noncalcareous, firm, with calcite filled fractures at 50°.
10.0' - Siltstone, brown with some gray, hard, calcareous.
4.0' - Shale, brown, silty, firm, calcareous, micaceous with calcite filled fractures.
7.0' - Siltstone, brown as above.
15.0' - Shale, brown as above, some fractures at 80°, not calcite filled.

Core #7: 1145'-1195' Recovered 50'

1.0' - Shale, brown and gray mottled, silty, noncalcareous, firm with waxy luster.
6.5' - Siltstone, brown and gray mottled, noncalcareous, hard, micaceous.
5.0' - Shale, brown and gray mottled as above with vertical fractures, open.
7.5' - Siltstone, brown, hard, slightly calcareous, micaceous with fluorescence and vertical fractures, open.
10.0' - Shale, gray brown mottled, slightly silty, soft to firm, noncalcareous, slakes.
4.0' - Shale as above, silty and calcareous, hard.
1.0' - Siltstone, medium gray, calcareous, hard, micaceous.
5.0' - Shale, brown gray mottled, firm, noncalcareous, waxy.
1.0' - Siltstone, green gray, hard, conchoidal fractures.
5.5' - Shale, brownish gray, soft, firm, noncalcareous, slakes.
3.5' - Sandstone, light gray, very fine to fine grained, very calcareous, hard, with green and brown grains, fair sorting, looks tight, no show.

Core #8: 1195'-1245' Recovered 50'

1.5' - Shale, greenish gray, silty, firm, slightly calcareous, blocky.
3.5' - Shale, brown, red and gray mottled, silty, firm, noncalcareous, waxy.
11.5' - Shale, black with some gray, very silty, noncalcareous, hard, questionable fractures at 45°.
3.5' - Siltstone, gray, brown, calcareous, hard with some brown and green grains.
4.0' - Shale, gray, green, soft, silty, slakes, slightly calcareous.
2.0' - Shale, reddish gray, silty, noncalcareous, hard.
6.0' - Sandstone, brown to gray, very fine grained, limey, silty with black and brown grains, tight, no show.
2.0' - Siltstone, brown, calcareous, hard, micaceous with green and black grains, open fractures at 75° with live oil.
6.0' - Shale, black to gray, mottled, silty, hard, calcareous with conchoidal fractures.
5.0' - Shale, gray to green, waxy, slightly silty, slakes.
5.0' - Shale, brown, silty, noncalcareous, hard.

Field Chalk Creek Sec. 6 T. 2 N. R. 6 E.

Farm Chalk Creek Government Well No. 1

Company Mountain Fuel Supply

FORMATION RECORD	FORMATION RECORD	From	To

Core #9: 1245'-1285' Recovered 40'

24.0' - Shale, brown with some gray, silty, hard, calcareous with calcite filled fractures at 20°.
1.0' - Shale, gray, hard, slightly calcareous.
6.0' - Sandstone, very fine to fine grained, gray, calcareous, hard with some gray grains, calcite filled fractures at 80° with oil fluorescence, tight.
5.0' - Shale, dark gray, hard, slightly calcareous, silty, a probable bedding plane at 25°.
4.0' - Sandstone, gray, very fine to fine grained, hard, calcareous, tight, some green grains, vertical open fractures with oil fluorescence.

Core #10: 1285'-1295' Recovered 10'

8.0' - Sandstone, fine to medium grained, gray, vertical fractures with fluorescence, slightly calcareous, thin to 1/2-inch shale streaks, pyritic, a bedding plane at 32°, tight.
2.0' - Sandstone, fine to medium grained, gray, calcareous, some slight streaks of shale, some carbonaceous inclusions, 1/2-inch wide calcite filled vein at 80° which probably stopped the coring as the barrels jammed, porous.

Core #11: 1295'-1324' Recovered 29'

1.0' - Siltstone, dark gray, hard, calcareous.
1.5' - Shale, brown, gray, soft, slakes, slightly calcareous.
2.5' - Shale, greenish gray, silty, hard, calcareous with calcite filled fractures at 30° and 70°.
2.5' - Shale, gray, soft, slakes, calcareous.
5.0' - Shale, greenish gray, hard, slightly calcareous, silty.
7.5' - Sandstone, fine grained, gray, hard, calcareous, calcite filled fractures at 30° and 70°, some unfilled fractures at 70° with spotty fluorescence, looks tight.
9.0' - Sandstone, very fine to fine grained, gray, hard, calcareous, some green and brown grains with open fractures at 70° with spotty fluorescence, tight.

Core #12: 1324'-1350' Recovered 26'

1.0' - Sandstone, fine to medium grained, gray, micaceous, pyritic, calcite filled fractures at 70°, a bedding plane at 17°, calcareous, mineral fluorescence, tight.
2.0' - Shale, gray, hard, calcareous, calcite filled vugs.
7.0' - Sandstone, fine to medium grained, some coarse grains, green and brown grains, calcareous, hard, thin shale streaks at 10°, calcite filled fractures at 70°, one fracture filled with siltstone, yellow fluorescence, probably mineral, fair porosity.
6.0' - Shale, grayish brown, soft, calcareous, slakes, calcite filled fractures at 70°.
10.0' - Shale, brown, hard, calcareous with light gray streaks.

Core #13: 1350'-1378' Recovered 28'

6.0' - Shale, brownish gray, silty, calcareous with thin to 1½" thick silty streaks.
1.0' - Siltstone, gray, hard, calcareous with thin shale streaks.
4.5' - Shale, black, silty, hard, slakes, calcareous, calcite filled fractures at 30°.
7.5' - Sandstone, very fine to fine grained, gray, many thin shale streaks, calcite filled fractures at 70°, some fluorescence in fractures.
9.0' - Sandstone, medium grained, some coarse grained, gray, calcareous, friable to hard, fractures at 70°, some calcite filled, much fluorescence on fractures in friable portion.

FORMATION RECORD

FORMATION RECORD

From To

Core #14: 1378'-1409' Recovered 31'

20.0' - Interbedded shale, black, silty, calcareous, slakes, and sandstone, medium to coarse grained, hard to friable, gray, pyritic, calcareous, looks tight to porous, sandstone and shale beds vary from 1' to fractions of an inch in thickness, calcite filled fractures at 70° throughout.

3.5' - Shale, grayish black, silty, pyritic, calcareous, soft, calcite filled fractures at 70°, a bedding plane at 20°.

7.5' - Sandstone, very fine to fine grained, gray, calcareous, hard to friable with vertical calcite filled fractures and some thin shale streaks, with two beds of siltstone, dark gray, hard, calcareous, pyritic, shaley with calcite filled fractures at 70°.

Core #15: 1409'-1429' Recovered 20'

3.0' - Sandstone, gray, fine grained, some medium grained, hard to friable, calcareous with abundant brown and green grains, gold fluorescence, looks tight, vertical open fractures.

2.0' - Sandstone, gray, very fine to fine grained, hard, tight, very calcareous, abundant pyrite, no fluorescence and vertical open fractures.

1.0' - Sandstone, gray, same as top 3'.

0.5' - Shale, greenish gray, hard, noncalcareous, silty, with conchoidal fractures.

4.0' - Sandstone, gray, very fine grained, very silty, some thin shale streaks, calcareous, hard, tight, with green, brown and black grains, calcite filled fractures at 50°, no show.

1.5' - Shale, black, calcareous, brittle with waxy luster, calcite filled fractures at 70°.

2.0' - Sandstone, gray, very fine grained, with some medium grained, poorly sorted, with green, brown, black and orange grains, hard and tight, calcareous, some very thin gray shale streaks.

3.0' - Shale, black to dark gray, hard, silty, with calcite filled fractures at 50° and 70°.

3.0' - Sandstone, gray, very fine to coarse grained, brown and orange grains, very silty with very thin green shale streaks, some small brown shale inclusions, appears to be reworked sediments, very highly fractured with fluorescence in fractures.

Core #16: 1429'-1452' Recovered 23'

1.5' - Shale, dark gray, silty, calcareous with thin streaks of sandstone.

12.0' - Sandstone, gray, very fine to fine grained, calcareous, hard to friable, silty, looks tight, abundant fine black grains, possible cross-bedding, good to spotty fluorescence, open fractures at 50°, 70°, and vertical.

5.0' - Sandstone, gray, very fine to fine grained, hard, calcareous, tight, silty, few coarse grains, poorly sorted with dark and light gray shale breccia, average size about 1", spotty fluorescence.

3.0' - Sandstone, gray, same as 12' above with spotty fluorescence.

1.5' - Shale, conglomerate breccia, dark gray shale matrix with some rounded gray dense crystalline limestone cobbles, 2' on the long axis, some brown thin crystalline limestone, some shale breccia, not well indurated.

Core #17: 1452'-1466' Recovered 14'

4.0' - Sandstone, conglomerate, dark gray to medium gray, very fine to coarse grained, angular grains, poorly sorted, shaley, cherty, calcareous, hard, some pebble sized grains, looks fused in part, some fluorescence where sandy, open fractures at 40°.

2.0' - Shale, conglomerate breccia, inclusions are chert, crystalline limestone, white and brown, some cobble sized sandstone and gray chert matrix is finely pyritic and hard.

FORMATION RECORD	FORMATION RECORD	From	To

Core #17 (Cont'd.)

7.5' - Sandstone, gray, fine to medium grained, poorly sorted, angular grains, calcareous, silty, hard to friable, abundant black grains, some brown and orange grains, looks tight, possible bedding at 23°, open and calcite filled fractures at 55°; possible cross-bedding, good fluorescence and cut in sandstone and fluorescence in fractures.

0.5' - Sandstone, gray, very fine grained, calcareous, hard, tight with clay matrix, fair fluorescence.

Core #18: 1466'-1487' Recovered 21'

12.0' - Sandstone as in 7.5' above, good fluorescence, vertical and calcite filled fractures, open fractures at 60° in basal foot.

5.5' - Sandstone and shale conglomerate, coarse grained to pebble sized with chert, limestone, shale and quartz and silty to sandy matrix.

3.5' - Shale, dark gray, calcareous, hard, silty with very thin sandstone streaks containing abundant pyritic veining.

Core #19: 1487'-1515' Recovered 28'

3.0' - Shale, gray, silty, hard, calcareous with calcite filled fractures from 30 to 60°.

7.0' - Sandstone conglomerate, sandstone inclusions, pebble to conglomerate, 1/4" to 3' in size, subrounded to rounded, hard, fine grained, gray, calcareous, matrix very fine to coarse grained, angular, calcareous with abundant chert, dark gray, brown and white limestone with veins of good fluorescence.

5.0' - Sandstone, gray, very fine grained, hard, very calcareous, tight with calcite filled fractures at 80° and vertical, spotty fluorescence, top contact at 30°.

1.0' - Siltstone, gray, brown, hard, calcareous with conchoidal fractures.

12.0' - Shale, brownish red with some gray mottling, silty, hard, calcareous, micaceous, containing occasional pebbles, tan, rounded crystalline limestone.

Core #20: 1515'-1546' Recovered 31'

6.0' - Shale, gray with red mottling, silty, calcareous, slakes, calcite filled fractures at all angles.

9.0' - Shale, brownish red, some gray mottling, hard, calcareous, silty, calcite filled fractures at 30 and 50°.

13.0' - Shale, brownish gray, calcareous, silty, slakes with abundant irregular calcite filled veins and pods.

3.0' - Siltstone, brown with gray mottling, hard, calcareous, micaceous with open fractures at 70° to 80°.

Core #21: 1546'-1596' Recovered 50'

23.0' - Siltstone, brown, hard, calcareous, some gray mottling, fractures at 70°, shaley.

1.0' - Sandstone, medium to coarse grained, gray, hard, calcareous, some fluorescence, fair porosity.

0.5' - Shale, brownish red, soft, calcareous, calcite filled fractures at 30 to 70°.

9.0' - Shale, gray, soft, calcareous, 1/4" calcite filled fractures at 30°.

3.0' - Shale, grayish black, soft, calcareous, calcite filled fractures at 70°, some fluorescence.

3.5' - Shale, grayish black, soft, calcareous, calcite filled fractures at 70°, some fluorescence, possible bedding plane, some limey brown nodules.

0.5' - Shale, gray, soft, calcareous, fluoresces, gray mottled, silty.

2.0' - Shale, grayish black, calcareous, calcite filled fractures at 20°, possible bedding plane, some limey nodules.

2.5' - Shale, brownish gray, calcareous, slakes, soft, calcite filled fractures at 25° and 70°.

5.0' - Siltstone, brownish red, calcareous, hard, calcite filled fractures at 40° with limey green nodules, some fluorescence.

FORMATION RECORD	FORMATION RECORD	From	To

Core #22: 1596'-1605' Recovered 8'

8.0' - Shale, brownish red, mottled with gray, soft, calcareous, with calcite filled fractures at 70°, bottom burnt in.

Core #23: 1605'-1621' Recovered 16'

16.0' - Shale, brownish red with gray mottling, slightly calcareous, silty, waxy with calcite filled fractures at all angles.

Core #24: 1621'-1628'

3.0' - Shale, brownish red as previous core.
4.0' - Siltstone, brown with gray mottling, calcareous, micaceous with some black inclusions, hard, calcite filled fractures at all angles.

Core #25: 1628'-1634' Recovered 6'

1.0' - Siltstone, light gray with brown mottling, calcareous with micaceous and black inclusions, hard, calcite filled fractures at 30° and vertical.
5.0' - Shale, brownish red with gray mottling, very slightly calcareous, silty, micaceous with waxy texture, top contact at 28°, possibly some open fractures at 20° to 30°.

Core #26: 1634'-1645' Recovered 11'

4.0' - Sandstone, grayish brown and gray, very fine grained, limey, pyritic with abundant green and black grains, fair sorting, subangular, looks tight, 1.0' bleeding oil, calcite filled fractures at 70° and vertical.
7.0' - Siltstone, brownish red, calcareous, micaceous with black grains and small coal inclusions along contact, hard, calcite filled fractures at 30° and 20°.

Core #27: 1645'-1658' Recovered 13'

12.0' - Siltstone, brownish red, calcareous, shaley, micaceous, black grains, hard, calcite filled fractures at all angles.
1.0' - Siltstone, gray, calcareous, shaley, micaceous, black grains and red inclusions, hard.

Core #28: 1658'-1673' Recovered 15'

10.0' - Siltstone, grayish brown, shaley, slightly calcareous, firm with calcite filled fractures at 30° and 45°.
5.0' - Siltstone, brown, mottled with gray, shaley, slightly calcareous, firm to hard, no visible fracturing.

Core #29: 1673'-1722' Recovered 49'

7.0' - Siltstone, brown, gray mottled, shaley, slightly calcareous, hard, calcite filled multi-angled fractures.
7.0' - Sandstone, tan, very fine grained, very silty, calcareous, green and black grains, micaceous, angular, fair sorting, hard, tight, no fluorescence, multi-angled calcite filled fractures.
35.0' - Shale, brown, gray bands and mottling, very silty, calcareous, some coarse grained, brown and black, rounded inclusions with a hard dull texture, multi-angled calcite filled fractures.

Core #30: 1722'-1771' Recovered 49'

46.0' - Shale, brown with some light gray mottling, silty, calcareous, hard, micaceous, dull, multi-angled calcite filled fractures throughout.
3.0' - Siltstone, light brown, shaley, very calcareous, hard, micaceous, multi-angled calcite filled fractures throughout.

FORMATION RECORD

FORMATION RECORD

From To

Core #31: 1771'-1788' Recovered 17'

12.0' - Siltstone, brown, shaley, calcareous, hard, micaceous with multi-angled calcite filled fractures.
5.0' - Sandstone, light gray with thin dark gray to black bands, very fine grained, slightly calcareous, silty, hard with some black grains, multi-angled calcite filled fractures, good scattered fluorescence.

Core #32: 1788'-1815' Recovered 27'

2.0' - Sandstone, light gray with thin dark gray to black bands, very fine grained, silty, slightly calcareous, hard, scattered fluorescence, multi-angled calcite filled fractures.
1.5' - Sandstone, light gray, fine grained, slightly silty, calcareous, some dark grains, good fluorescence, multi-angled calcite filled fractures.
2.0' - Sandstone, light gray, very fine grained, silty, calcareous, scattered fluorescence, multi-angled calcite filled fractures.
0.5' - Shale, dark gray, silty, soft, sticky.
8.5' - Sandstone, light gray, very fine grained, silty, calcareous, hard, tight, some black grains, scattered fluorescence, multi-angled calcite filled fractures.
1.0' - Conglomerate, dark gray chert and limestone pebble inclusions in a dark gray shale matrix with some sandstone grains, pebbles are angular.
3.0' - Conglomerate made up of some chert pebbles and sandstone pebbles, sandstone matrix is dark gray, fine to coarse grained, calcareous, hard, with scattered fluorescence, pebbles are angular.
8.5' - Sandstone, gray, very fine grained, very silty, calcareous, hard, tight, no fluorescence, multi-angled calcite filled fractures.

Core #33: 1815'-1863' Recovered 48'

8.5' - Sandstone, light gray, very fine grained, calcareous, silty, hard, multi-angled calcite filled fractures.
11.0' - Sandstone, gray, fine grained, calcareous, silty, hard, good fluorescence, multi-angled calcite filled fractures.
6.0' - Sandstone, gray, very fine grained, calcareous, very silty, hard, tight.
7.0' - Sandstone, gray, fine to coarse grained, calcareous, silty, hard.
1.5' - Conglomerate, medium, made up of angular to subrounded chert and limestone pebbles, white, up to 1/2" in diameter in a dark gray calcareous, hard, shaley matrix with fine to very coarse grained sandstone grains, scattered throughout.
14.0' - Sandstone, gray, medium grained, calcareous, silty, hard.

Core #34: 1863'-1894' Recovered 31'

2.0' - Sandstone, gray, fine to coarse grained, calcareous, silty, poorly sorted, angular, hard, tight with brown and black grains and some large pebble sized brown limestone inclusions, calcite filled fractures at 30 and 45°.
4.0' - Conglomerate, brown and gray limestone pebbles, 1/16" to 3/4" in diameter, subangular, crystalline in a matrix of sandstone, fine to very coarse grained, calcareous, slightly silty with brown and black chert grains, very hard, tight, calcite and pyrite filled fractures at 60 and 75°.
2.0' - Shale, brown and gray, calcareous, silty, dull to waxy, hard, multi-angled calcite filled fractures.
2.5' - Shale, brown and gray, calcareous, silty, firm, slakes, calcite filled fractures.
4.0' - Shale, brown with gray mottling, calcareous, silty to sandy, hard, dull, multi-angled calcite filled fractures.
4.0' - Siltstone, brown with gray mottling, calcareous, sandy, micaceous, hard with some red grains.
10.0' - Shale, brown with gray mottling, calcareous, silty, hard, calcite filled fractures at 30 to 40°.
2.0' - Siltstone, tan, slightly calcareous, sandy with black, red and brown grains, vertical open fractures.
0.5' - Sandstone, tan, very fine grained, calcareous, silty, with black, brown and green grains, micaceous, hard, tight, subangular grains, fair sorting, no fluorescence.

FORMATION RECORD	FORMATION RECORD	From	To

Core #35: 1894'-1927' Recovered 33'

9.0' - Sandstone, as bottom of previous core, multi-angled calcite filled fractures, spotty yellow fluorescence.
7.5' - Sandstone, gray, very fine to fine grained, few streaks of coarse grained, angular, calcareous, silty, poorly sorted with red, brown and black grains, hard, tight, no fluorescence, multi-angled calcite filled fractures.
16.5' - Shale, brown, gray mottled, grading to brown and gray at bottom, calcareous, silty, micaceous, hard, dull multi-angled calcite filled fractures.

Core #36: 1927'-1952' Recovered 22'

14.0' - Shale, brown with gray mottling, silty, calcareous, waxy, firm, abundant multi-angled calcite-filled fractures.
6.0' - Shale, brown with gray mottling, silty, calcareous with inclusions of coarse crystalline limestone, slakes.
2.0' - Shale, brown with gray mottling, same as top 14'.
3.0' - Lost core.

Core #37: 1952'-1965' Recovered 13'

13.0' - Shale, brown, gray mottled, silty, calcareous, fine to soft, waxy, multi-angled calcite-filled fractures.

Core #38: 1965'-1987' Recovered 20'

11.0' - Shale, brown and gray mottled, silty, calcareous, firm to soft, multi-angled, calcite-filled fractures.
3.5' - Siltstone, brown, gray mottled, calcareous, shaley, hard, multi-angled calcite-filled fractures.
5.5' - Shale, brown, gray mottled, calcareous, silty, hard, multi-angled calcite-filled fractures.
2.0' - Lost core.

Core #39: 1987'-2023' Recovered 36'

36.0' - Shale, as bottom of previous core.

Core #40: 2023'-2048' Recovered 25'

6.5' - Shale, brown, gray mottled, calcareous, silty to sandy, firm, slakes with inclusions of gray dense hard limestone, a 1/4 to 3/4-inch subangular fragment; multi-angled, open and calcite filled fractures.
4.5' - Shale, as above, becoming sandy and hard.
9.0' - Shale, same as top of core, but appears to be deformed or crushed, many multi-angled calcite-filled fractures, possible fault zone?
5.0' - Shale, brown with trace of gray mottling, noncalcareous, silty to sandy, hard, one 3" angular sandstone inclusions, very fine grained, possibly a carbonaceous, hard, noncalcareous, multi-angled calcite-filled and open fractures.

Core #41: 2048'-2098' Recovered 50'

5.0' - Shale, brown, gray mottled, calcareous, silty to sandy, hard, micaceous, with black inclusions, multi-angled calcite filled fractures.
3.0' - Sandstone, tan, very fine grained, calcareous, silty, hard, tight, micaceous with some organic and black inclusions, no fluorescence, no fractures, transitional with shale above.
20.0' - Shale, brown, gray mottled, calcareous, silty to sandy, hard, micaceous with some black inclusions, few open fractures at 70°.

FORMATION RECORD	From	To
Core #41 (Cont'd.)		
3.0' - Sandstone, tan, very fine grained, calcareous, silty, hard and tight with abundant black and brown, fine inclusions, micaceous, no fluorescence, multi-angled calcite filled fractures.		
1.0' - Shale, as above.		
6.0' - Sandstone, as above.		
10.0' - Siltstone, tan, calcareous, hard, transitional with sandstone above, multi-angled calcite filled fractures.		
2.0' - Shale, brown with trace of gray mottling, calcareous, very silty, hard, transitional with siltstone above, no fractures.		
Core #42: 2098'-2120' Recovered 22'		
8.5' - Shale, as bottom of previous core.		
5.5' - Siltstone, brown, gray mottled, limey, sandy, very hard, micaceous, multi-angled calcite filled fractures, contact at top at 50°.		
5.0' - Sandstone, gray, very fine grained, limey, very hard, tight, with abundant black, red, and brown inclusions, multi-angled, very fine, calcite filled fractures, contact at top at 24°.		
1.0' - Siltstone, as above, few inclusions of reworked fragments of angular sandstone, with composition of sandstone as above.		
2.0' - Sandstone as above, no fluorescence.		
Shale, brown, with gray mottling, sandy, calcareous; sandstone, white, very fine grained, hard, calcareous, well sorted; siltstone, brown, calcareous, hard.	2120	2135
Shale as above; sandstone as above; some sandstone, gray, medium gray, hard, calcareous, poorly sorted; siltstone, tan, hard, calcareous.	2135	2145
Shale, brown, with gray mottling, firm, calcareous; siltstone, brown and tan, hard, calcareous; sandstone, gray, very fine grained, calcareous, hard.	2145	2155
Shale as above; sandstone, tan, very fine grained, calcareous, hard, well sorted; siltstone, brown as above; trace sandstone, white, very fine grained, hard.	2155	2165
Shale as above; sandstone, tan and white; siltstone as above.	2165	2175
Shale, brown, silty to sandy, firm; sandstone, tan and white, hard, calcareous; siltstone, brown, hard; trace limestone, gray, dense, hard; trace shale, brown and gray.	2175	2210
Shale as above; increase in sandstone, gray, white, very fine to fine grained, hard, calcareous, some with green and brown grains; siltstone as above.	2210	2230
Shale, brown, silty and sandy as above; sandstone as above; siltstone, brown and tan; some evidence of calcite-filled fractures.	2230	2260
Shale as above; sandstone as above; trace shale, gray, firm, silty.	2260	2270
Shale, brown as above; sandstone as above; sandstone, gray, fine grained, friable to loose, calcareous, bentonitic; trace coal; some shale, gray, firm, silty, abundant bentonitic.	2270	2280
Shale, becoming greenish-gray, silty, firm; sandstone, gray, greenish-gray, very fine grained, firm, to friable, abundant black, fine inclusions, silty, calcareous, bentonitic; trace coal.	2280	2299
THRUST FAULT @ 2299'		
FRONTIER @ 2299'		
Sandstone, tan, very fine to fine grained, loose, well sorted; some shale, greenish-gray, silty, soft, bentonitic; trace coal.	2299	2325
Sandstone as above; some sandstone, gray, salt & pepper, fine grained, calcareous, friable; trace coal; some greenish-gray, dense, gypsiferous anhydrite, translucent, fairly hard; some evidence of calcite-filled fractures in sandstone; shale, gray, greenish gray, firm, silty.	2325	2349
TOTAL DEPTH - 2349'.		

INFORMATION COPY FOR UTAH OIL & GAS CONSERVATION COMMISSION

BEST COPY AVAILABLE

Form 9-330

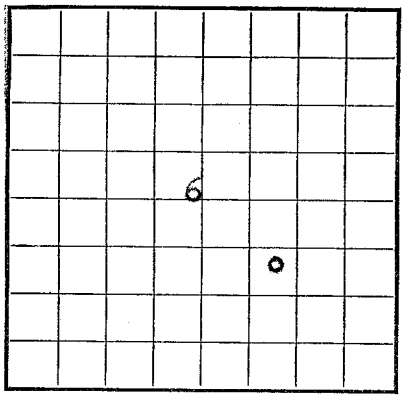
Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

U. S. LAND OFFICE Salt Lake

SERIAL NUMBER 070555

LEASE OR PERMIT TO PROSPECT L.

10



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Mountain Fuel Supply Company Address P. O. Box 1129, Rock Springs, Wyoming

Lessor or Tract Federal Field Chalk Creek area State Utah

Well No. Gov't. #1 Sec. 6 T. 2N R. 6E Meridian S. L. County Summit

Location 1675 ft. {N.} of S. Line and 1800 ft. {E.} of E. Line of sec. 6 Elevation 6563.63
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed

Date July 7, 1960 Title Vice President

The summary on this page is for the condition of the well at above date.

Commenced drilling March 2, 1960 Finished drilling May 3, 1960

OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from ____ to ____ No. 4, from ____ to ____

No. 2, from ____ to ____ No. 5, from ____ to ____

No. 3, from ____ to ____ No. 6, from ____ to ____

IMPORTANT WATER SANDS

No. 1, from 1783.12'KBM to 1870' KBM No. 3, from ____ to ____

No. 2, from ____ to ____ No. 4, from ____ to ____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
10-3/4	32.75&40.5	8rnd	Spang	148.11	Howco				Surface
7"	20#	8rnd	Spang	1791.86	Howco		Open hole		Production

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4	155.38KBM	125	Howco - displacement		Displaced with 15.5 bbl wat.
7"	1783.12KBM	300	Howco - displacement		" " 71 bbl water

PLUGS AND ADAPTERS

Heaving plug—Material ____ Length ____ Depth set ____

Adapters—Material ____ Size ____

FOLD | MARK

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4	155.38KBM	125	Howco - displacement		Displaced with 15.5 bbl wat.
7"	1783.12KBM	300	Howco - displacement		" " 71 bbl water

FOLD | MARK

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____

Adapters—Material _____ Size _____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from 0 feet to 2349 feet, and from _____ feet to _____ feet

Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

June 7, 19 60 — Put to producing SI well to be used for potential gas storage injection well., 19____

The production for the first 24 hours was _____ barrels of fluid of which _____% was oil; _____% emulsion; _____% water; and _____% sediment. Gravity, °Bé. _____

If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. _____

EMPLOYEES

Western Drilling Company, Contr.

L. A. Greene, Driller — A. G. Warren, Driller

K. M. Martin, Driller — _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
			See attached formation record.
			(2) Electric logs enclosed.

AUG 1 1960

FROM—	TO—	TOTAL FEET	FORMATION

[OVER]

16—43094-4

FORMATION RECORD—Continued

Fuel Mountain
Fuel Storage well file

THE STATE OF UTAH

OFFICE OF STATE ENGINEER

SALT LAKE CITY

WAYNE D. CRIDDLE
STATE ENGINEER

January 24, 1961

Mr. Bernard Kastler, Jr., Secretary
Mountain Fuel Supply Company
P. O. Box 989
Salt Lake City, Utah

Re: Ground Water - Summit County

Dear Mr. Kastler:

I am writing to confirm several points covered in our brief discussion when both you and Mr. J. T. Simon visited this office last week.

We were advised at the time of your visit that your Chalk Creek Government Well No. 4, constructed as part of your subsurface gas storage investigations, is capable of yielding 7,050 barrels of water per day, and that the following represents a partial chemical analysis of the water:

Na	523 ppm
Ca	10 "
Mg	3 "
SO_4	30 "
Chlorides	173 "
Carbonate	60 "
Bicarbonate	976 "
Total	1279 "

Ph: 8.2

Resistivity: 4.8 ohms per meter at 68°F.

It is the understanding of this office that the Mountain Fuel Supply Company has no desire to appropriate or acquire any right to the water yielded by this well, but that the water is merely a by-product of the subsurface gas storage operation. It is likely that this volume of daily water production will be attractive to others who may seek to acquire a right to use it. Such a right can only be initiated by

filing an application in this office. The processing of the application would include the publication of Notice to Water Users and the setting of a protest period, in which your organization would have an opportunity to set forth your position with regard to your interest in the well and the purpose of its function with regard to the underground storage program.

This office sees no reason why you should not proceed to discharge water from the well as part of your subsurface operations, and it appears from the above water quality information that it is not likely to interfere with the use of other natural water supplies.

We will appreciate the opportunity to collect a water sample after the well has been in production, in order that a more complete chemical analysis can be made by the Water Quality Branch of the U. S. Geological Survey as part of its cooperative program with this office.

Sincerely yours,

Francis T. Mayo

Francis T. Mayo, Chief
Water Resources Branch

FTM:ej

cc: Oil and Gas Conservation Commission

Mr. J. G. Connor
Quality of Water Branch
U.S.G.S.

Mr. Lynn Thatcher, Chief
Bureau of Sanitation
State Department of Health

Gerard Thomas - SLM
#650 328/4219
API
Oil tanks / welding

Doug Stiles

Paul - Dpty. Fuel
Re-enter 9/25/74
Chalk Creek #1 — Gave Verbal
Gas Storage — Approval

to run as observation well

PMB

3100
U-09712-A
et al
(U-942)
C. Seare
3/9/89

DECISION

Questar Pipeline Company	:	Oil and Gas Leases
P.O. Box 11450	:	U-09712-A et al
Salt Lake City, Utah 84147	:	

Corporate Name Change Recognized

Acceptable evidence has been received establishing that Mountain Fuel Resources, Inc. has changed their name to Questar Pipeline Company. Accordingly, the surviving company, Questar Pipeline Company, is recognized as holding all interests in Federal oil and gas leases which were held by Mountain Fuel Resources, Inc. We are changing our records with respect to the attached listing of oil and gas leases. If there are any other leases that will be affected, please contact this office.

/s/ M. Willis
ACTING Chief, Minerals
Adjudication Section

Enclosure
List of Leases

cc: All District Offices, Utah
MMS, AFS
MMS, BRASS
920, Teresa Thompson
Clay Basin Unit File

CSeare:sl 3/9/89:1642f

List of Leases

Overriding Royalties

U-09712-A
U-011246

Operating Rights

SL-045051-A & B
SL-045053-A & B
SL-062508
SL-070555
SL-070555-A
SL-045049-A & B

Clay Basin Gas Storage Agreement
Agreement No. 14-08-0001-16009

QUESTAR PIPELINE COMPANY

79 SOUTH STATE STREET • P. O. BOX 11450 • SALT LAKE CITY, UTAH 84147 • PHONE (801) 530-2400

June 23, 1988

CERTIFIED MAIL
RETURNED RECEIPT REQUESTED
#P 879 571 459

Bureau of Land Management
Utah State Office
CFS Financial Center
324 S. State Street
Salt Lake City, UT 84111-2303

Re: Name Change
Mountain Fuel Resources, Inc.
to Questar Pipeline Company

Gentlemen:

Enclosed for your files and information is a certified copy of the Articles of Amendment to the Articles of Incorporation of Mountain Fuel Resources, Inc. dated March 7, 1988, indicating that Mountain Fuel Resources, Inc. changed its name to Questar Pipeline Company.

Questar Pipeline Company holds interests in the following Federal Oil and Gas Leases in Utah:

No wells on lease hold w/in CA – U-9712-A – Questar Energy Co 100%
CA well – RT & OR's Mtn. Fuel Resources – U-011246 RT Asgmt pending to "Questar Energy CO"
SLC-045051(A) > OR's
SLC-045051(B)
SLC-045053(A) > OR's
SLC-045053(B)
SLC-062508 – OR's
SLC-070555 – OR's
SLC-070555(A) – OR's
? Agreement No. 14-08-0001-16009
(Clay Basin Gas Storage Agreement)
Vernal

Please note and adjust your records in accordance with the above and furnish verification of your receipt of this notice to the undersigned.

Sincerely,

J. B. Neese
Senior Landman

JBN/sdg

Enclosure

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING
1. GLH
2. CDW
3. FILE

Change of Operator (Well Sold) — Designation of Agent/Operator

X Operator Name Change — Merger

The operator of the well(s) listed below has changed, effective: **3/7/1988**

FROM: (Old Operator):	**TO:** (New Operator):
N0680-Mountain Fuel Supply Company 180 E 100 S Salt Lake City, UT 84139 Phone: 1-(801) 534-5267	N7560-Questar Pipeline Company PO Box 11450 Salt Lake City, UT 84147 Phone: 1-(801) 530-2019

CA No. **Unit:**

WELL(S)

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
COALVILLE GAS STORAGE 1	09	020N	050E	4304310691	99990	Fee	GS	A
COALVILLE GAS STORAGE 2	10	020N	050E	4304330005	99990	Fee	GS	A
COALVILLE GAS STORAGE 3	10	020N	050E	4304330007	99990	Fee	GS	A
COALVILLE GAS STORAGE 4	10	020N	050E	4304330009	99990	Fee	GS	A
COALVILLE GAS STORAGE 5	10	020N	050E	4304330011	99990	Fee	GS	A
COALVILLE GAS STORAGE 6	10	020N	050E	4304330020	99990	Fee	GS	A
COALVILLE GAS STORAGE 7	10	020N	050E	4304330021	99990	Fee	GS	A
CHALK CREEK GOVT 4	06	020N	060E	4304305003	99990	Federal	GS	A
OHIO GOVT WELL 1 CHALK CREEK	06	020N	060E	4304305004	99990	Federal	GS	A
TEXOTA UTAH FED L 1	06	020N	060E	4304305005	99990	Federal	GS	A
CHALK CREEK GOVT 2	06	020N	060E	4304305006	99990	Federal	GS	A
CHALK CREEK GOVT 3	06	020N	060E	4304305007	99990	Federal	GS	A
CHALK CREEK GOVT 1	06	020N	060E	4304305008	99990	Federal	GS	A
CHALK CREEK GOVT 5	06	020N	060E	4304305009	99990	Federal	GS	A
CHALK CREEK GOVT 6	06	020N	060E	4304305018	99990	Federal	GS	A

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 1/13/2004
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 1/13/2004
3. The new company was checked on the **Department of Commerce, Division of Corporations Database on:** 1/14/2004
4. Is the new operator registered in the State of Utah: YES Business Number: 649172-0142
5. If **NO**, the operator was contacted contacted on: _____

6. (R649-9-2)Waste Management Plan has been received on: IN PLACE

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: 3/9/1989

8. **Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: n/a

10. **Underground Injection Control ("UIC"** The Division has approved UIC Form 5, **Transfer of Authority to Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: N/A

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 1/29/2004
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 1/29/2004
3. Bond information entered in RBDMS on: 1/29/2004
4. Fee wells attached to bond in RBDMS on: 1/29/2004
5. Injection Projects to new operator in RBDMS on: n/a

STATE WELL(S) BOND VERIFICATION:

1. State well(s) covered by Bond Number: n/a

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: 965002976

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: n/a

FEE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 965003033

2. The **FORMER** operator has requested a release of liability from their bond on: N/A
The Division sent response by letter on: N/A

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 1/29/2004

COMMENTS:

Form OGC-1b

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

5. LEASE DESIGNATION AND SERIAL NO.: SLC 070555

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER Gas Storage Well

7. UNIT AGREEMENT NAME: Lease E. F. Parkinson

2. NAME OF OPERATOR: Questar Pipeline Company (Formerly Mountain Fuel Resources)

8. FARM OR LEASE NAME: Chalk Creek Gas Storage

3. ADDRESS OF OPERATOR: P.O. Box 11450, Salt Lake City, UT 84147

9. WELL NO.: MFS Co. Gov't No. 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: SE NW SE, 1,800' FEL, 1,675' FSL

RECEIVED APR 24 1989 DIVISION OF OIL, GAS & MINING

10. FIELD AND POOL, OR WILDCAT: Chalk Creek, Kelvin

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 6, T2N, R6E

14. PERMIT NO.: 43-043-05008

15. ELEVATIONS (Show whether DF, RT, GR, etc.): KB 6,750' GR 6,563

12. COUNTY OR PARISH: Summit

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	XX	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			☐
(Other) See Below			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Questar Pipeline Company intends to carry out the following workover program to increase well deliverability:

1. Run 2 1/4" mill on 1.66" O.D. tubing and clean open hole section out to 1,831'
2. Pull tubing and rerun with sliding side door.
3. Acidize well with 1,200 gals. 7.5% HCl

This program is scheduled to be started in June, 1989.

18. I hereby certify that the foregoing is true and correct

SIGNED R. E. Krueger TITLE Manager, Reservoir Eng. DATE April 20, 1989

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Federal approval of this action is required before commencing operations.

ACCEPTED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 5-4-89
BY: John R. Baza

*See Instructions on Reverse Side

Form OGC-1b

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

10

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

5. LEASE DESIGNATION AND SERIAL NO.: SLC 070555

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER: Gas Storage Well

RECEIVED
SEP 06 1989

7. UNIT AGREEMENT NAME: Lease E. F. Parkinson

2. NAME OF OPERATOR: Questar Pipeline Company (Mountain Fuel Supply Co)

8. FARM OR LEASE NAME: Chalk Creek Gas Storage

3. ADDRESS OF OPERATOR: P.O. Box 11450, Salt Lake City, UT 84147

9. WELL NO.: MFS Co. Gov't No. 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: SE NW SE, 1,800' FEL, 1,675' FSL

10. FIELD AND POOL, OR WILDCAT: Chalk Creek, Kelvin

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 6, T2N, R6E

14. PERMIT NO.: 43-043-05008

15. ELEVATIONS (Show whether DF, RT, GR, etc.): KB 6,750' GR 6,563'

12. COUNTY OR PARISH: Summit

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	XX	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) See Below			
(Other)			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Questar Pipeline Company has carried out the following workover program (started on June 26th and finished June 30th).

1. Killed well, run 2¼" mill on 1.66" O.D. tubing and cleaned well to 1,872' K.B.
2. Pull 3½" O.D. tubing rerun with sliding sleeve in open position.
3. Acidized well with 1,200 gallons 7.5% HCl.

The well will flow through both tubing and annulus simultaneously during the coming seasons.

OIL AND GAS	
DRN	R
JRB	1- GLH ✓
DTS	CLS
2-TAS	
3- MICROFILM ✓	
4- FILE	

18. I hereby certify that the foregoing is true and correct

SIGNED R. E. Knight TITLE Manager, Reservoir Eng. DATE 9/5/89

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

NEW ENTITY NUMBERS ASSIGNED FEBRUARY 2004

ACCT	OPERATOR NAME	API NUM.	Sec	Twnshp	Rng	WELL NAME	ENTITY	EFF DATE	REASON
N7560	Questar Pipeline Co	4304305003	06	020N	060E	Chalk Creek Gov 4	99990 to 14039	2/10/2004	Chalk Creek Gas Storage
N7560	Questar Pipeline Co	4304305004	06	020N	060E	Ohio Govt Well Chalk Creek	99990 to 14039	2/10/2004	Chalk Creek Gas Storage
N7560	Questar Pipeline Co	4304305005	06	020N	060E	Texota Utah Fed L 1	99990 to 14039	2/10/2004	Chalk Creek Gas Storage
N7560	Questar Pipeline Co	4304305006	06	020N	060E	Chalk Creek Gov 2	99990 to 14039	2/10/2004	Chalk Creek Gas Storage
N7560	Questar Pipeline Co	4304305007	06	020N	060E	Chalk Creek Gov 3	99990 to 14039	2/10/2004	Chalk Creek Gas Storage
N7560	Questar Pipeline Co	4304305008	06	020N	060E	Chalk Creek Gov 1	99990 to 14039	2/10/2004	Chalk Creek Gas Storag
N7560	Questar Pipeline Co	4304305009	06	020N	060E	Chalk Creek Gov 5	99990 to 14039	2/10/2004	Chalk Creek Gas Storage
N7560	Questar Pipeline Co	4304305018	06	020N	060E	Chalk Creek Gov 6	99990 to 14039	2/10/2004	Chalk Creek Gas Storage

Note to file: These entity numbers were changed to compliment the operator correction from 3/7/98